

Serial No. 10/025,460
Amdt. dated December 22, 2003
Reply to Office Action of July 21, 2003

Docket No. 2119-0171P

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6, 12, and 14 – 19 (canceled)

Claim 7 (Original): An optical micro-switch comprising:

a first optical input/output port;

a plurality of second optical input/output ports; and

an optical guiding assembly operatively coupling first optical input/output port to at least one of said plurality of second optical input/output ports along one of plural optical paths, said optical guiding assembly including,

a horizontal electrostatic comb drive, and

an optical micro-element operably connected to said comb drive,

said comb drive moving said optical micro-element to plural positions greater than two and corresponding in number to plural input/output ports, to direct an optical signal between said first optical port and a selected one of said second optical input/output ports.

Claim 8 (Currently Amended): The optical micro-switch of claim 7, wherein at least one of said input and output ports has plural channels.

Claim 9 (Currently Amended): The optical switch of claim 7, wherein the actuator assembly further includes a horizontal electrostatic comb drive.

Claim 10 (Currently Amended): The optical switch of claim 7, wherein the optical micro-element includes an a lens mounted to have an intended optical path generally parallel to said generally planar substrate.

Claim 11 (Original): The optical switch of claim 7, wherein the optical micro-element includes an optical glass ball lens.

Claim 13 (Currently Amended): A [The method of claim 12] method for switching an optical signal between a first optical input/output port and at least one of a plurality of second optical input/output ports the method comprising:

- a) providing said first and second optical input/output ports in an arrangement generally parallel to a generally planar supporting substrate;
- b) providing an a micro-optical element between said first optical input/output port and said plurality of second optical input/output ports, an optical path generally parallel to said supporting substrate being defined between said first optical input/output port and said micro-optical element;

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c) directing the optical signal between the first optical input/output port and a selected one of the plurality of second optical input/output ports by shifting said micro-optical element in a direction transverse to said optical path and wherein there are at least three second optical input/output ports, said step c) of directing switching said optical micro-element to plural positions corresponding in number to the number of said plural second optical input/output ports.